he considers is an accident that the surgeon should take every precaution to avoid. The operation was performed with the loss of only a few drops of blood, and this came apparently from the incision in the meatus.

Oct. 18th.—Yesterday was passed without fever, hæmorrhage, or shivering. Another dose of quinine was administered last night, and the patient kept on low diet. He slept little on account of the instrument. The patient allows the urine to flow out about every two hours; his tongue is moist.

19th.—Slept better last night. To leave off the quinine, as there has been no shivering; in all respects going on well, and he is allowed a more generous diet; there is no pain in the perinæum; to sponge the perinæum with warm water.

20th.—The patient having been disturbed by the bandage which attaches the catheter to the body, it was removed, as well as the elastic catheter, and another introduced; a good deal of discharge followed. He states that last night, owing to the frequent efforts to micturate, urine escaped by the fistula. This is to be accounted for by the irritation occasioned by the instrument. The way M. Ricord fixed the catheter is as follows:—He attaches two pieces of cotton string, as seen in the last engraving, to the end of the catheter; and then, by a cross-piece, ties their four ends, and connects them to the suspensory bandage, avoiding all constriction, and yet keeping the instrument firmly in the bladder.

I should mention, that after employing the coarctotôme, it should be taken to pieces and carefully wiped. Particular care should be taken to run a piece of wire along the canal conducting the little knife, as moisture is apt to lodge there, and the novice is likely to lose the little screws which form part of the instrument, unless warned to be careful.

(To be continued.)

FOURTH QUARTERLY METEOROLOGICAL AND CHEMICAL REPORT AT ST. THOMAS'S HOSPITAL FOR 1855.

By ROBERT DUNDAS THOMSON, M.D., F.R.S. L. & E.,
PROFESSOR OF CHEMISTRY IN ST. THOMAS'S HOSPITAL COLLEGE, VICE-PRESIDENT OF THE BRITISH METEOROLOGICAL SOCIETY, ETC.

IN the temperature of the quarter, 44°·6, there is a close correspondence with that of the preceding year, 44°·5; for although the late December was much colder, 38°·4, than that of 1854, which was 42°, still the heat of October and November of the present year exceeded that of last year, and thus equalized the temperature for the quarter. The greatest cold, 21°·3, on the 21st of December, 1855, was considerably below that of the preceding year, 27°·5. The result of the intense cold of December has been a great augmentation in mortality above the age of sixty, and an increase in rheumatic and nervous diseases, dependent upon deficiency of stimulus. It has been noticed in the St. Thomas's laboratory, that a continuance of such low temperature causes the deposition of nitrate of urea, on the addition of nitric acid to urines generally with a specific gravity above 1022. The mean pressure of the atmosphere has been nearly the same as the corresponding quarter of 1854. The amount of rain-fall in this quarter has been much greater, 4·92 inches in 1854, and 8·58 in 1855.

In regard to the mean of the whole year, we observe a remarkable difference in the average temperature, for whereas the mean temperature of London for sixty-five years, at Somerset House, was found 49°·7, and that of last year, at St. Thomas's Hospital, was exactly 49°·7, the temperature of the year 1855 was, at St. Thomas's, 48°·2, or very nearly the same as that found, 48°·3, for Greenwich Observatory for seventy-eight years; so that the result of the cold has been to produce a country temperature for London, the annual heat of which, in the neighbourhood of the Thames, is about one and a half degrees above that of the contiguous neighbourhood. The pressure of the cold was experienced in January, February, March, April, May, September, and December. In all the other months of the year, the temperature of 1855 was higher than in 1854, but still their augmentation was not sufficient to equalize the temperature of the whole year.

The mean atmospheric pressure for the whole year has been 29·948 inches, which is very nearly that of the barometer at the level of the sea, or 29·92 inches, the cistern of the barometer being about nine feet eight inches above high-water mark at London-bridge, as ascertained by levelling.

It is an interesting fact, not undeserving of notice in this place, that the regular registration of the climate of the metropolis of the British empire, for the last two years, but for a private individual, would have been in abeyance; and that these observations would probably not have seen the light, except for the facility with which they have gained access into the pages of THE LANCET. Should the positions now vacant in the different parishes be filled by good observers, we may expect to have, in the course of time, valuable data for the comparison of urban and suburban climates.

It may be only necessary to take this opportunity, in consequence of many communications which have been made to the author, to intimate that he will be most happy to afford to his professional brethren a sight of his instruments, and an explanation of the mode of observing, should they find it convenient to call at the hospital.

PHARMACEUTICALS, ETC.

In consequence of the investigation which took place before the House of Commons during the summer, when it was asserted by some of the witnesses that the facts of the impurity of drugs had been much exaggerated, it might perhaps be expected that from St. Thomas's laboratory no breath of complaint should emanate for this quarter. The results, however, of our examinations do not confirm any such anticipation. Without entering into the metaphysical discussions respecting wilful adulterations, or impurities from ignorance, &c., it is essential for the physician to know the chemical composition of the medicines he prescribes, and what would probably satisfy many of the faculty would be to have pointed out to them before writing their prescription the amount of the genuine article present in the druggist's bottle, since it is purely an example of abstract reasoning to the patient to discuss from what source the impurity may have been derived.

1. *Acidum Hydrochloricum.*—A quantity of this acid of the Pharmacopœia strength having been ordered, a sample was sent, which, instead of 32·32 per cent., contained 42· per cent. of acid, being stronger than that required by 9·68 per cent. This fact having been intimated to the party who sent the article, a sample was returned containing 35·9 per cent.

2. *Acidum Hydrocyanicum.*—A sample sent contained 1·64 per cent of acid. On being returned, the strength of the replacing acid was 2·04 per cent.

3. *Acidum Aceticum.*—A sample gave 29·95 glacial acetic acid, instead of 37 per cent., the Pharmacopœia strength, inferior in strength by 7·05 than it ought to have been.

Here then are three common acids, not one of which was of the proper strength ordered, nor was any intimation given by which their divergence from their proper character could have been suspected. In contrast with these, two other determinations of common acids are appended to show that the desirable object can be accomplished of obtaining articles of definite composition.

4. *Acid. Sulphuricum.*—This contained 78·6 per cent. of dry acid, that of the Pharmacopœia possessing 78·9 per cent.

5. *Acid. Nitricum.*—A sample gave 60·35 of dry acid, that of the Pharmacopœia containing 60· per cent.

6. *Ung. Hydrargyri Amm. Chloridi.*—This ointment contained a small proportion of white precipitate and a large quantity of chalk.

7. *Hydrargyri Ammonia Chloridum.*—From the preceding result this sample was examined, when it was found to contain much chalk. This specimen was exhibited to the committee of the House of Commons.

8. *Ung. Antimonii Potassio Tartratis* was found to contain chalk.

9. *Ceratum Hydrargyri Comp.* was found to contain no lead, but smelt of camphor.

10. *Ferri Ammonio Citras.*—A sample gave 27·72 per cent. of sesquioxide of iron, another 36·5, instead of about 34 per cent.

11. *Tinctura Sesquichloridi Ferri.*—A sample yielded 27·64 grs. per fluid ounce of sesquioxide of iron, instead of about 30.

12. *Calamina Preparata.*—A sample of this, sent as a peculiarly pure article, was found to contain—

Sulphate of baryta	86·60
Sesquioxide of iron	2·04
Chalk	10·52
Water	0·84
	100·

No trace of zinc could be detected.

13. *Morphiæ Hydrochloras.*—A sample left a residue of ·24

October, 1855.—31 Days.

Week ending—	Barometer. Corrected Mean.	Thermometers. Dry.	Wet.	Highest	Lowest	Adopted Temperature of Air.	Adopted Temperature of Evaporation.	Dew Point.	Elastic Force of Vapour.	Weight of Vapour in Cubic Foot of Air.	Wind.	Rain. Amount	Days
	Inches.	°	°	°	°	°	°	°	Inches.	Grains.		Inches.	
Saturday, 6th ...	29·489	57·2	54·8	65·0	53·7	57·8	55·4	52·6	·424	4·78	S.W.	2·00	6
,, 13th ...	29·570	52·9	49·6	60·5	49·7	53·5	50·2	44·8	·336	3·82	W.	·19	4
,, 20th ...	29·812	49·5	47·6	56·5	46·7	50·0	48·1	44·1	·304	3·50	W.	·70	2
,, 27th ...	29·859	50·9	49·0	58·6	49·0	51·9	50·0	46·0	·350	3·99	S.W.	·76	3
Monthly Mean, from 1st to 31st, inclusive.	29·635	51·7	49·5	59·0	48·9	52·3	50·1	45·8	·348	3·97	W.	5·54	17

	Inches.		
Highest reading of barometer on 24th	30·310	Highest reading of thermometer on 1st	68°·1
Lowest reading of barometer on 30th	29·095	Lowest reading of thermometer on 28th	41°·0
Monthly range	1·215	Range of temperature in the month	27°·1

November, 1855.—30 Days.

Week ending—	Barometer. Corrected Mean.	Thermometers. Dry.	Wet.	Highest	Lowest	Adopted Temperature of Air.	Adopted Temperature of Evaporation.	Dew Point.	Elastic Force of Vapour.	Weight of Vapour in Cubic Foot of Air.	Wind.	Rain. Amount	Days
	Inches.	°	°	°	°	°	°	°	Inches.	Grains.		Inches.	
Saturday, 3rd ...	29·544	45·5	44·0	50·2	40·3	45·3	43·8	40·4	·285	3·30	N.N.E.	2·95	5
,, 10th ...	29·930	47·4	46·6	51·5	43·3	47·2	46·4	44·0	·321	3·69	Variable.	·73	5
,, 17th ...	30·154	43·5	41·4	49·2	40·7	44·0	41·9	37·9	·259	3·00	Variable.	·00	0
,, 24th ...	29·965	40·4	39·5	44·6	39·9	41·1	40·2	37·6	·256	3·00	Variable.	·15	3
Monthly Mean, from 1st to 30th, inclusive.	30·085	42·5	41·4	47·7	40·5	43·1	42·0	39·2	·271	3·15	N.E.	1·93	13

	Inches.		
Highest reading of barometer on 26th	30·338	Highest reading of thermometer on 7th	55°·8
Lowest reading of barometer on 8th	29·535	Lowest reading of thermometer on 16th	32°·3
Monthly range	·803	Range of temperature in the month	23°·5

December, 1855.—31 Days.

Week ending—	Barometer. Corrected Mean.	Thermometers. Dry.	Wet.	Highest	Lowest	Adopted Temperature of Air.	Adopted Temperature of Evaporation.	Dew Point.	Elastic Force of Vapour.	Weight of Vapour in Cubic Foot of Air.	Wind.	Rain. Amount	Days
	Inches.	°	°	°	°	°	°	°	Inches.	Grains.		Inches.	
Saturday, 1st ...	30·122	40·7	39·0	45·3	39·3	41·3	39·6	36·0	·243	2·80	N.W.	·15	3
,, 8th ...	29·804	38·2	36·3	43·3	36·1	38·9	37·0	33·2	·215	2·52	N.E.,N.W.	·04	1
,, 15th ...	30·111	34·8	33·9	38·7	31·2	34·9	34·0	31·7	·204	2·41	Variable.	·07	1
,, 22nd ...	30·193	31·4	30·8	38·4	29·3	32·6	32·0	30·0	·192	2·28	E.S.E.	·00	0
,, 29th ...	29·706	45·7	44·9	49·0	39·7	45·0	44·2	42·4	·297	3·44	S.W.	·97	5
Monthly Mean, from 1st to 31st, inclusive.	29·983	38·0	37·0	42·9	34·6	38·4	37·4	35·0	·229	2·69	N.W.	1·11	8

	Inches.		
Highest reading of barometer on 19th	30·414	Highest reading of thermometer on 29th	52°·6
Lowest reading of barometer on 26th	29·251	Lowest reading of thermometer on 21st	21°·3
Monthly range	1·163	Range of temperature in the month	31°·3

Quarterly Summary.

Barometer. Corrected Mean.	Thermometers. Dry.	Wet.	Highest	Lowest.	Adopted Temperature of Air.	Adopted Temperature of Evaporation.	Dew Point.	Elastic Force of Vapour.	Weight of Vapour in Cubic Foot of Air.	Wind.	Rain. Amount	Days
Inches.	°	°	°	°	°	°	°	Inches.	Grains.		Inches.	
29·901	44·1	42·6	49·9	41·3	44·6	43·2	40·0	·283	3·27	S.W.	8·58	38

Yearly Summary.

Barometer. Corrected Mean.	Thermometers. Dry.	Wet.	Highest	Lowest.	Adopted Temperature of Air.	Adopted Temperature of Evaporation.	Dew Point.	Elastic Force of Vapour.	Weight of Vapour in Cubic Foot of Air.	Wind.	Rain. Amount	Days.
Inches.	°	°	°	°	°	°	°	Inches.	Grains.		Inches.	
29·948	47·9	45·1	55·4	43·8	48·2	45·4	41·0	·304	3·47	N.E.	21·14	108

per cent. of inorganic matter, partially soluble in water, and yielding chlorine and lime. Another sample was sent, containing 1·11 per cent. of inorganic residue. It only gave 11·1 per cent. of water at 212°. The commercial salt usually possesses 13 per cent.

14. *Pulvis Rhœi.*—Four samples of this powder were carefully microscopically examined, and were all found to contain more or less starch, a characteristic of the inferior kinds of roots.

15. *Scammonium.*—A fine sample contained only 1·27 per cent. of inorganic residue. No starch could be detected either microscopically or chemically. This is the first sample of pure scammony which has come under our notice, and it is a fact deserving of attention, as indicating that when starch and chalk occur in scammony, they are sophistications.

January, 1856.

ON A

CASE OF CONSTIPATIO-ENTERITIS.

BY GEORGE REDFORD, ESQ., M.R.C.S, L.A.C.,
ACTING ASSISTANT-SURGEON, DEPÔT, 58TH REGT., PLYMOUTH.

PRIVATE T. R——, of the 58th regiment, aged twenty, an Englishman, agricultural labourer, of two and a half years' service, was admitted into the General Military Hospital, Plymouth, on November 26th, 1855.

He is pale and weakly in appearance, although stout-built, is pitted with small-pox, and his general health seems impaired. The disease for which he was admitted was syphilis, in the form of a small, eroded chancre on the glans penis. He has a cough, which he says comes on every winter, and his father died of phthisis. He complains also of pain, with slight diarrhœa. The urine deposits a flocculent sediment, and reddens litmus. On examining the chest, there is dulness on percussion beneath the right clavicle, and the respiratory murmur is louder and rougher than natural; it is heard as loud and as much prolonged during expiration as during inspiration. I should therefore suspect there is tubercular deposit in the lungs. He was put on spoon diet, had a warm bath, and as the syphilitic affection was not urgent, a very mild form of mercurial was given to allay the irritation of the bowels—viz., Dover's powder, five grains; mercury with chalk, three grains, every four hours.

He improved, though the bowels continued irritable. He had uneasiness about the chest, and some slight cough; the pulse was but little quickened though the beat was sharply given.

Dec. 3rd.—His diet was improved with a chop and pudding. At night he had an attack of pain in the bowels, described as severe crampy kind of pain, which was relieved by a dose of calomel and opium.

On the following night the pain returned with more severity, and the calomel, with an increased dose of opium, was repeated, the bowels being relieved for the time; the bowels did not act, although he went to the stool several times.

He began to complain of tenderness on the morning of Dec. 5th, and the paroxysms of pain continued to occur constantly. The pulse was not affected and was moderately full and soft; the tongue moist and but little furred; the abdomen was rather swollen and tympanitic; no action of the bowels. To take calomel, two grains; opium, half a grain, every three hours, followed by a full dose of castor oil. An enema of turpentine and castor oil with warm gruel was administered, and brought away some small portions of fæces; it was repeated twice in the course of the afternoon, but without bringing any feculent matter away. Fomentations were continued from the first, and a large sinapism placed on the abdomen. In the evening he became very sick, and vomited nearly all the things taken; he had, however, less pain.

6th.—The attacks of pain continued in the night, but were not quite so severe; there is now rather less tenderness and tension of the abdomen; the umbilicus not retracted; the pulse very little affected; neither is the tongue loaded or dry; vomiting continues. The bowels have not acted. Two drops of croton oil were given, and the enema repeated without any effect. The calomel and opium were continued; and, in the afternoon, a full dose of sulphate of magnesia, with compound tincture and infusion of senna; but this was rejected. At nine P.M., I found him much distressed by the attacks of pain; his countenance anxious; and he was lying with the legs drawn up, complaining much of thirst; the tongue moist, with yellow fur in the centre; the pulse 80, rather full, not hard, but without any remarkable characteristic; the skin cool. The tenderness of the abdomen is increased, and is most urgent around the navel; there is no other part of the abdomen so tender. It was now evident that, although the pulse did not indicate it, there was severe inflammatory action set up. I decided to adopt antiphlogistic measures, and bled him to syncope from the arm (eighteen ounces), and applied twenty leeches to the abdomen, followed by a large poultice, continuing the calomel and opium every two hours.

7th.—He was somewhat better; the tenderness of the abdomen less urgent; and there is no continued pain. The pulse is reduced in force, but quickened; the tongue moist and yellowish; the thirst is distressing; and the vomiting continues. He has also hiccup, and eructations. No action of the bowels. The inflammatory symptoms seem to be yielding. The enema was repeated ineffectually; and two doses of croton oil failed in producing any action. A large blister was applied to the abdomen. In the morning he was much the same, but with no increase of the inflammatory symptoms.

8th.—There is still less tenderness of the abdomen, though the attacks of pain continue; there is less tension; and he lies straight in bed. The vomiting continues, with hiccup, now first suspected to be stercoraceous; and at three P.M., it was decidedly so, having the peculiar smell of fæces. This vomiting was a very distressing symptom; it was relieved somewhat by brandy and soda-water, and a small quantity of beef-tea was retained. As the inflammatory action was evidently subdued, I did not think it advisable to continue the calomel, as it was calculated to keep up the irritability of the stomach. It appeared to me better to endeavour to promote the natural action of the intestine, and stop the inverted action going on. With the view, then, of acting on the muscular coat of the intestine, compound aloes pill, ten grains, was given, and was retained by the stomach. In the hope of restraining the vomiting, and relieving pain, chloroform, five minims; tincture of opium, twenty-five minims; tincture of hops, one drachm, were given every four hours in tragacanth mucilage, and, if rejected, repeated immediately. A turpentine and camphor epithem was placed hot over the abdomen. Besides these remedies, I introduced the long tube, as recommended by Dr. O'Beirne; a quantity of wind was discharged, but no fæces; and I am not satisfied that it passed beyond, or even into, the sigmoid flexure. I think, to accomplish this would have required a greater degree of force than I felt disposed to employ. The end of the tube was covered with pieces of mucous membrane and some blood; the pouch of the rectum was quite empty. In the evening he was in a more favourable state; the vomiting was less frequent, but still stercoraceous; the pains continuing, but the tenderness decidedly less; no action of the bowels.

9th.—No action of the bowels, pain continuing at intervals; the abdomen more swollen, but not so tender; tongue dry and furred; pulse rather fuller; stercoraceous vomiting continues. Chloroform, fifteen minims, and tincture of opium, one drachm, were given in some bottled porter. This was retained; and afterwards, fifteen grains of compound aloes pill. Electro-magnetism was applied to the spine, and through to the epigastrium; it created much disturbance and pain, and was not continued more than a quarter of an hour. He fancied it relieved him. The chloroform mixture was continued, with five minims additional in each dose of chloroform. At nine P.M., he was suffering less pain; little or no tenderness of abdomen; the stercoraceous vomiting had ceased soon after the full dose of chloroform and opium; the skin was cool; the tongue moist, and cleaner; still no action of the bowels. The chloroform and opium continued; compound aloes pill, ten grains, repeated; and, as a last resource, the tobacco enema, (one drachm to a pint,) half of which was injected, and retained, though without producing any visible effect, or affecting the pulse. It was followed by introducing a suppository of extract of opium, ten grains. The patient soon after this begged to have a piece of mutton-chop and a glass of porter, which he was allowed, and part of which he ate with relish. In half an hour, he fell asleep—the first time for six days and nights. He slept soundly for eight hours, when he awoke, and went to the stool. The bowels acted copiously, the evacuation being fluid, containing abundance of bile, and to all appearance of a healthy character.

He is now improving every day, the bowels acting regularly, and without pain; there is no tenderness of the abdomen, and no hardness or irregularity about the intestines. The urine is still acid, and deposits a flocculent and slightly pink sediment.

The precise nature of this case is by no means clear. At the outset, it had all the appearance of colic; but the long continuance of the pain, in spite of such large quantities of opium, would not support this view; and it is difficult to believe that